

"THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT ©1978, DIGITAL EQUIPMENT CORPORATION."

BLANK

"THE MATERIAL HEREIN IS FOR INFORMATION PURPOSES ONLY AND IS SUBJECT TO CHANGE WITHOUT NOTICE. DIGITAL EQUIPMENT CORPORATION ASSUMES NO RESPONSIBILITY FOR ANY ERRORS WHICH MAY APPEAR HEREIN."

DRAWING DIRECTORY

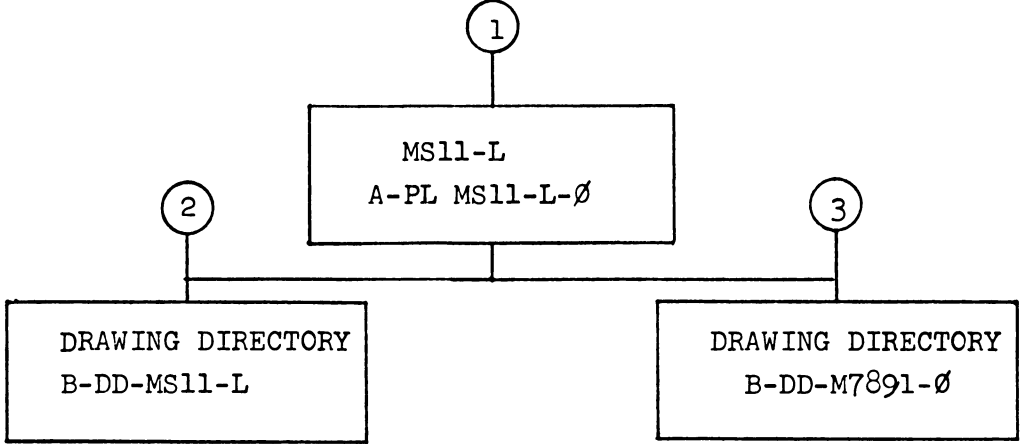
"THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1978 DIGITAL EQUIPMENT CORPORATION."

NOTE: FOR FIELD MAINTENANCE PRINT SET
SEE B-TC-MS11-L-1

UNIT VARIATIONS

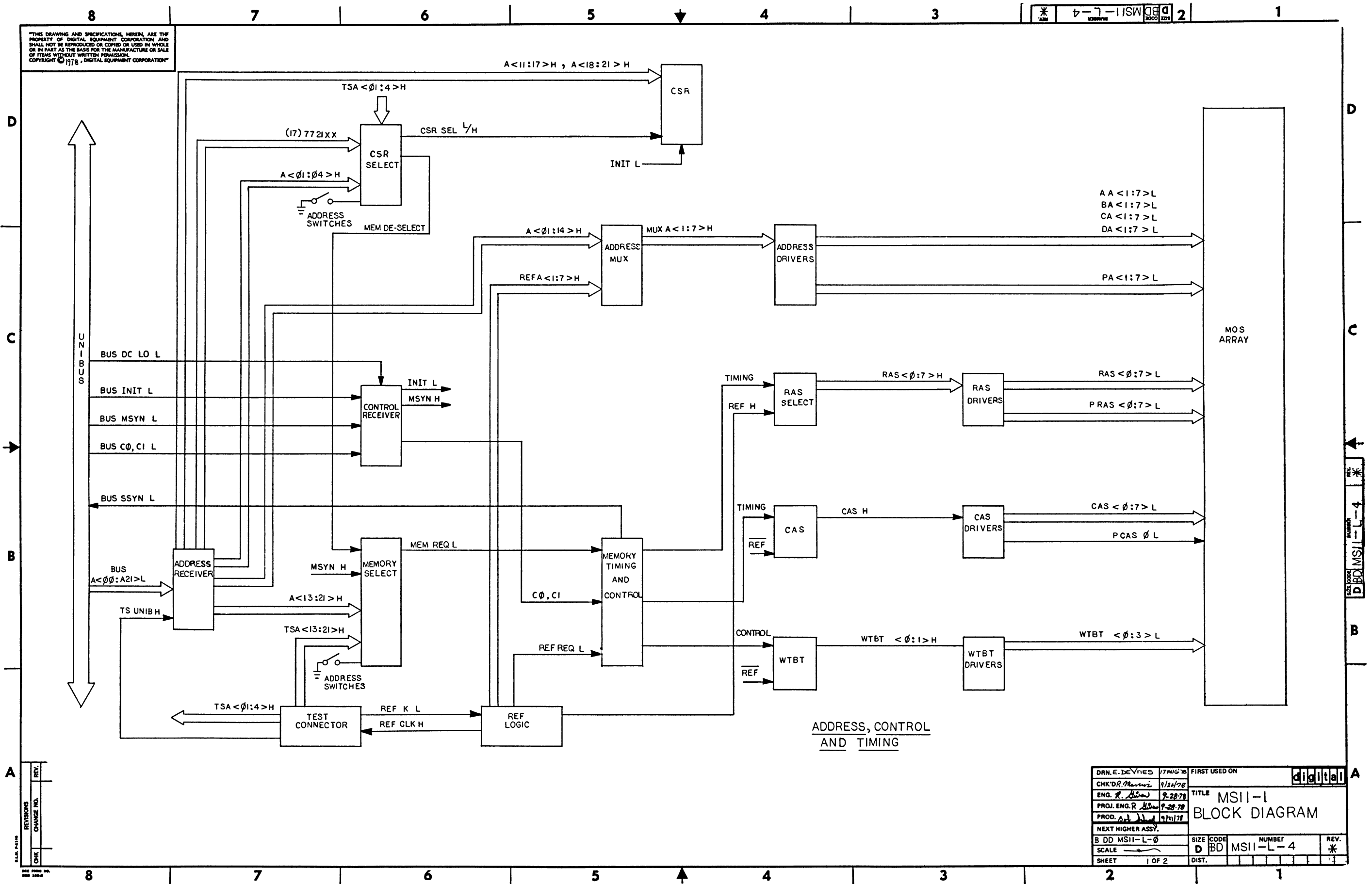
[illegible][illegible]

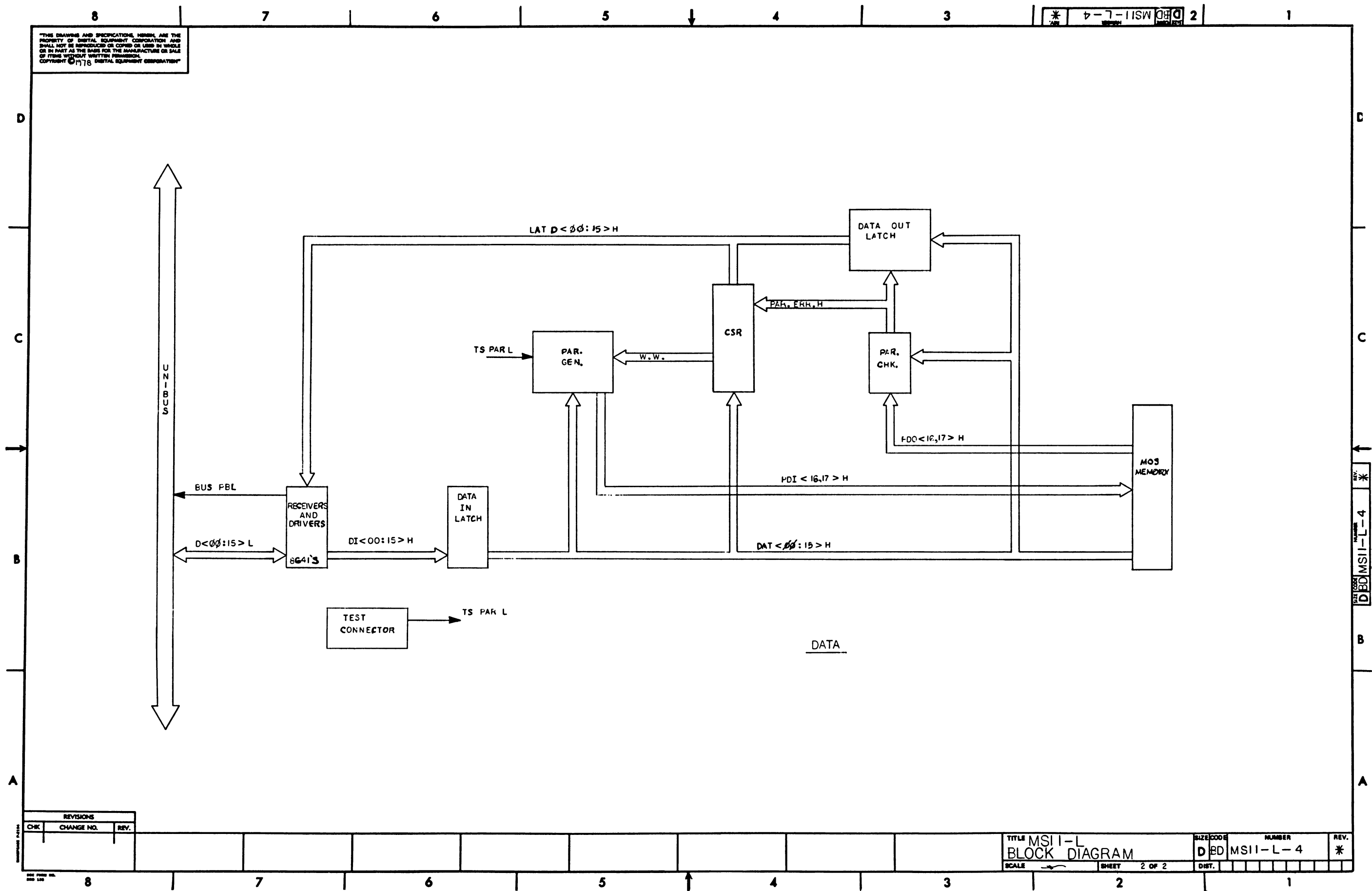
"THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.
COPYRIGHT © 1978 DIGITAL EQUIPMENT CORPORATION"



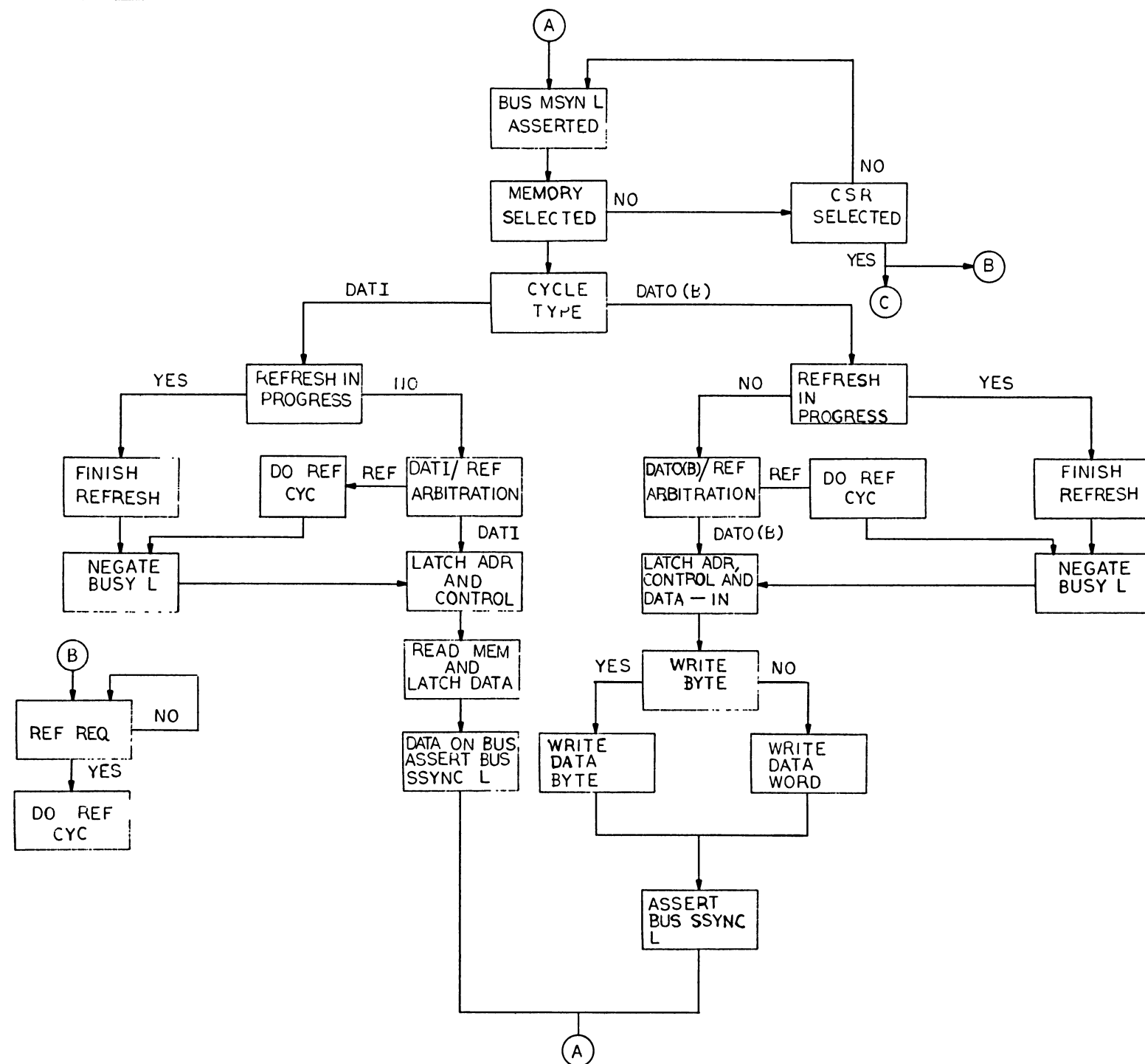
REV.	NUMBER MS11-L	DD CODE	B SIZE
------	------------------	------------	-----------

TITLE DRAWING DIRECTORY MS11 (128K X 18) MCS MEMORY SYSTEM	SHEET 2 OF 3	SIZE B DD	CODE DD	NUMBER MS11-L	REV *
---	--------------	--------------	------------	------------------	----------

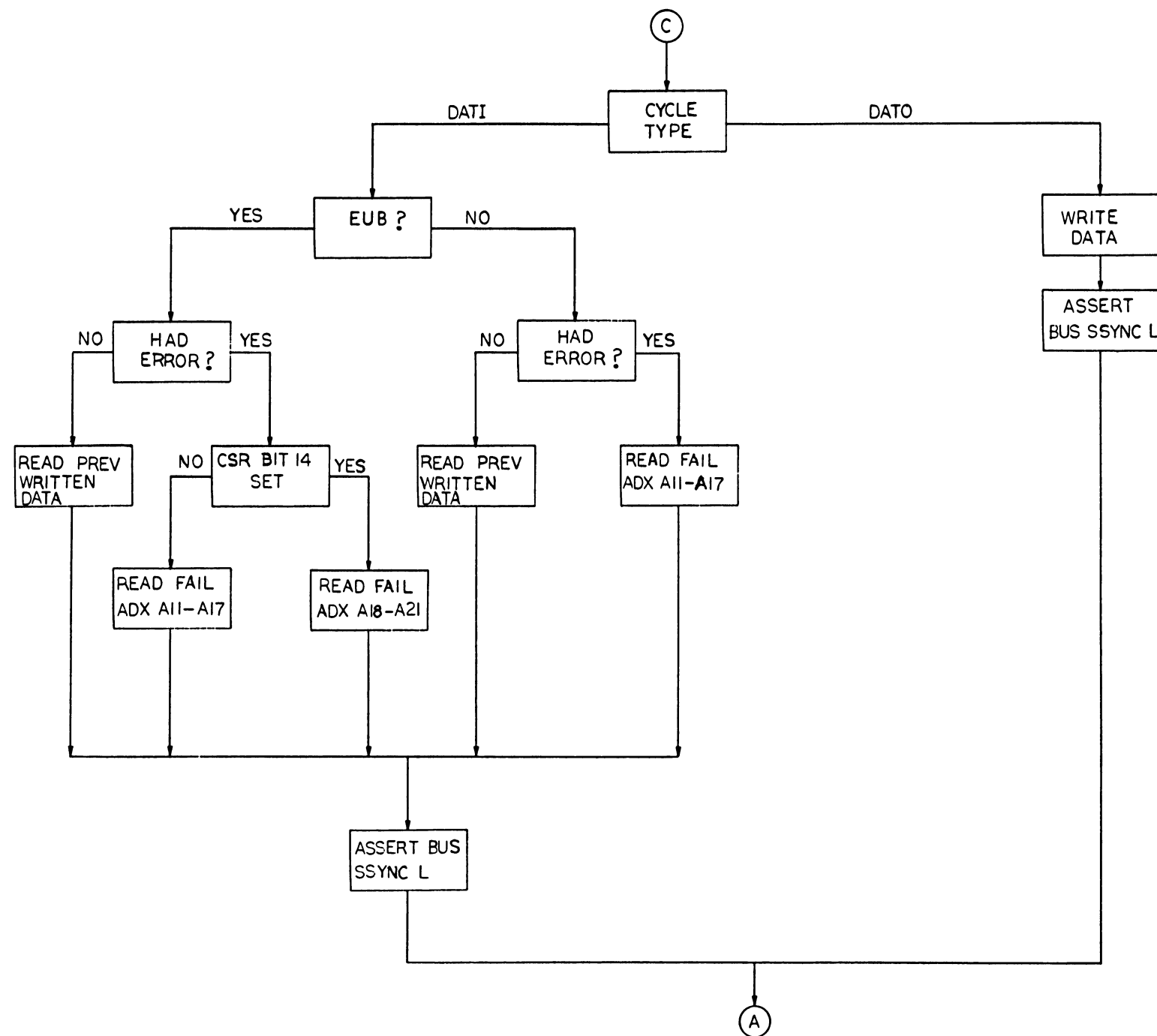




THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1978, DIGITAL EQUIPMENT CORPORATION



DRN. E. DeNero	29-6-78	FIRST USED ON	digital
CHK'D R. Manno	9/21/78	TITLE	MS11-L (DATI/DATO)
ENG. R. Higgins	9-28-78	FLOW DIAGRAM	
PROJ. ENG. R. Higgins	9-28-78		
PROD. R. Higgins	9/21/78		
NEXT HIGHER ASSY.			
B-DD-MS11-L		SIZE CODE	NUMBER
SCALE		D FD	MS11-L-5
SHEET	1 OF 2	DIST.	

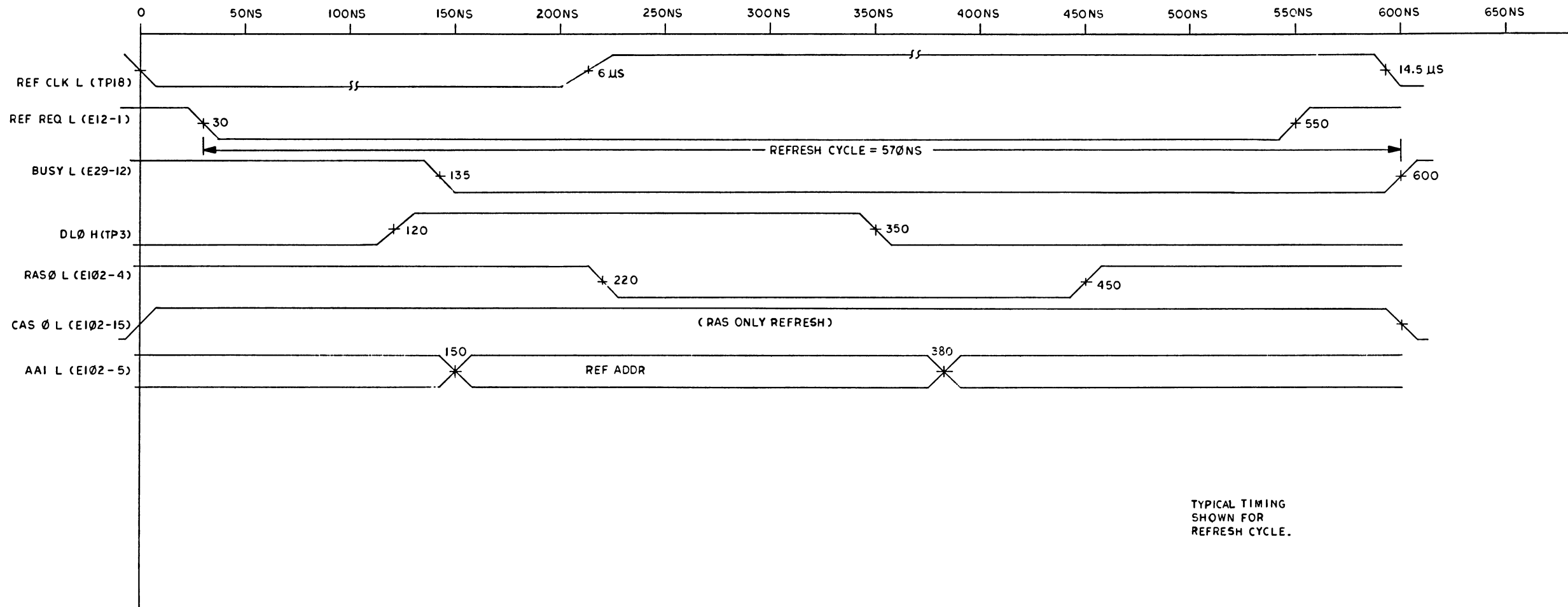


REVISIONS		
CHK	CHANGE NO.	REV.

"THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.
COPYRIGHT © 1978 DIGITAL EQUIPMENT CORPORATION"

* 9-7-11SW 2

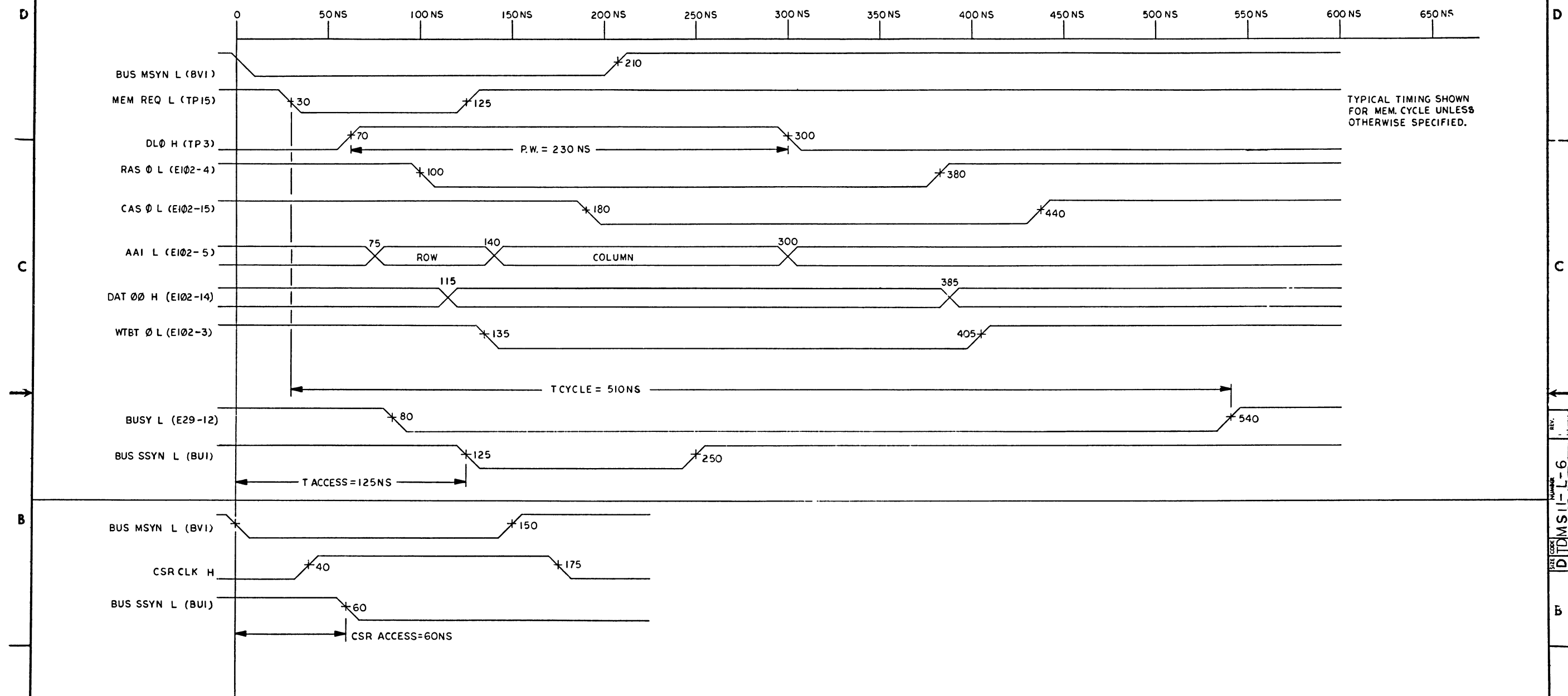
REFRESH CYCLE



TYPICAL TIMING
SHOWN FOR
REFRESH CYCLE.

DRN. J. Vincent	6-30-78	FIRST USED ON	digital
CHK'D R. N. N. N.	8/24/78	TITLE	MSII-L
ENG. R. N. N.	9-28-78	NUMBER	MSII-L-6
PROJ. ENG. R. N. N.	9-28-78	REV.	*
PROD. R. N. N.	9/21/78	SIZE CODE	D TD
NEXT HIGHER ASSY.	B-DD-MSII-L	SCALE	1 OF 3
SHEET	1 OF 3	DIST.	

"THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.
COPYRIGHT © 1978 DIGITAL EQUIPMENT CORPORATION"

DATA CYCLE

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE		MSII-L TIMING DIAGRAM			SIZE	CODE	NUMBER			REV
					D	TD	MSII-L-6			*
SCALE	SHEET		3	OF	3	DIST.				

BLANK

LINE	ITEM	DOCUMENT NO.	PART NO.	DESCRIPTION	QTY	REFERENCE DESIGNATORS
1	1	D-CS-M7891-0-1		CIRCUIT SCHEMATIC	REF	
2	2	D-UA-M7891-0-0		UNIT ASSEMBLY	REF	
3	3	D-DD-M7891-0-0		DRAWING DIRECTORY	REF	
4	4	D-MD-5013399-0-0		DRILL AND ETCH DRAWING	REF	
5	5	SEE NOTES BELOW.	5013399-00	128K X 18 MOS. MEM	1	
6	6		1001610-00	.01 MFD 50V 25U 309CER/8000PF MIN	49	C1,C2,C141-C182,C264,C266,C268,C270,C272
7	7		1010279-01	.47 MFD 25V 20% 2C023 CER.	90	C6,C8,C184-C263,C267,C269,C271,C273,C265,C278-C280
8	8		1012084-01	8 MFD 25V G% 30D AL EL (10-12	4	C10-C12,C276
9	9		1012121-00	220.0 MMF 100V 1%200PPM DM15S	2	C4,C5
10	10		1012219-00	47. MFD 30V G% 600D AL EL	5	C3,C9,C274,C275,C277
11	11		1109988-00	***** THIS ITEM IS NOT USED *****	-	
12	12		1110324-00	LED 1MCD010MA #MV5054-1#HP4882	1	D3
13	13		1114384-00	LED 105MW 35MA GREEN	1	D2
14	14		1209941-06	HEADER,100 20POS RT ANGLE	1	J1
15	15		1210711-02	HANDLE,HFX MODULE,10-1/2 \$	1	
16	16		1211751-00	FUSE, SUB-MINI, 2.000A, 125V, AXIAL LEAD	1	F1
17	17		1211164-00	SW,DIP 1P 1A 4POS	1	E47
18	18		1211164-05	SW,DIP 1P 1A 9POS	1	E61
19	19		1300271-00	220 1/4W 5% CC (13-00	3	R29,R32,R33
20	20		1300295-00	330 1/4W 5% CC (13-00	1	R3
21	21		1315679-00	R NETWORK 3-39 OHM RESISTORS 5% SIP	5	R36-R40
22	22		1300316-00	470 1/4W 5% CC (13-00	4	R11,R14,R19,R23
23	23		1300365-00	1 K 1/4W 5% CC (13-00	4	R13,R16-R18
24	24		1301874-00	5.6 K 1/4W 5% CC (13-00	4	R12,R15,R20,R30
25	25		1302377-00	39 1/4W 5% CC (13-00	2	R8,R35
26	26		1302411-00	511 1/4W 1% RN55D-F 100PPM (13-00	1	R6
27	27		1302874-00	147 1/4W 1% RN55D-F 100PPM (13-00	2	R7,R21
28	28		1302957-00	121 1/4W 1% RN55D-F 100PPM (13-00	1	R2

REVISION HISTORY			VARIATIONS FOR THIS ASSY.		FIRST USED ON: 11/34		DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	
CHK	ECO NO	REV	DC,DD,DF,CC,CD,CF,AC AD,AF,AC,BD,BF		MADE BY:	H.WEINBRENNER	DATE:	13-SEP-78
---	INIT	A			CHECKED:	R.V.MANION	DATE:	13-SEP-78
					DSN.ENG.:	P.GIVEN	DATE:	13-SEP-78
					PROD.:	R.SCHAAF	DATE:	13-SEP-78
					RESP.ENG.:	R.GIVEN	DATE:	13-SEP-78
					ASSY.NO.:	D-UA-M7891-0-0		

THIS DRAWING AND SPECIFICATIONS HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.
COPYRIGHT 1978. DIGITAL EQUIPMENT CORPORATION "

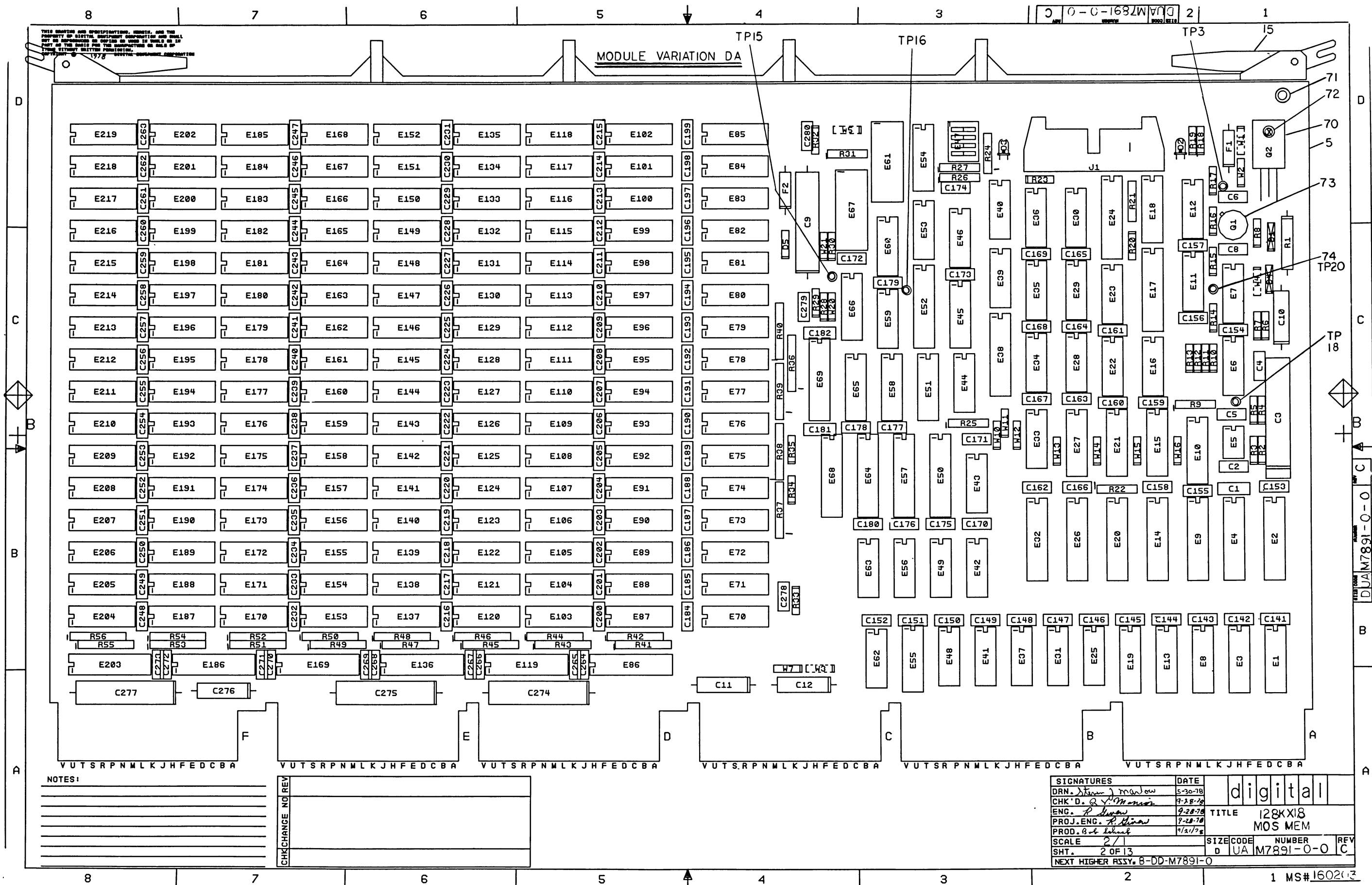
LINE	ITEM	DOCUMENT NO.	PART NO.	DESCRIPTION	QTY	REFERENCE DESIGNATORS
29	29		1303110-00	19.6 1/4W 1% RN55D-F 100PPM (13-00	1	R10
30	30		1303156-00	34.8 K 1/4W 1% PN55D-F 100PPM (13-00	1	R5
31	31		1305123-00	215 1/4W 1% RN55D-F 100PPM (13-00	1	R20
32	32		1305322-00	7.5 K 1/4W 1% RN55D-F 100PPM (13-00	1	R4
33	33		1312466-00	10 1W 1% WW (13-00	1	R1
34	34		1315678-00	R NETWORK 3-18 OHM RESISTORS 5% SIP	16	R41-R56
35	35		1315339-00	R NETWORK 4-5K RESISTORS 5% SIP	7	R9,R22,R24-R27,R31
36	36		1613120-00	DELAY= 200NS,10TAPS	1	E18
37	37		1910532-00	74S00 NAND GATE=QUAD 2IN	3	E16,E46,E53
38	38		1910533-00	74S03 NAND GATE=QUAD 2IN,OPN COLLECT	1	E7
39	39		1910536-00	74S10 NAND GATE=TRIPLE 3IN	2	E28,E39
40	40		1910537-00	74S11 AND GATE=TRIPLE 3INPUT	2	E29,E44
41	41		1910539-00	74S20 NAND GATE=DUAL 4INPUT	1	E59
42	42		1910544-00	74S74 FF-D DUAL,EDGE TRIGGER	2	E33,E34
43	43		1910544-01	74S74-60GG-D DUAL,EDGE TRIGGER,SYNCHR	1	E6
44	44		1910549-00	74S158 MUX 1 OF 2 (QUAD)	2	E58,E65
45	45		1911469-00	DEC 8640 RECEIVER,BUS,QUAD,UNIBUS,Q-BU	6	E48,E62,E25,E31,E37,E41
46	46		1911573-00	74S280 PARITY GEN/CHKR,9BIT ODD/EVEN	4	E42,E49,E56,E63
47	47		1911579-00	8641 TRANSCEIVER,BUS,QUAD,UNIBUS	6	E1,E3,E8,E13,E19,E55
48	48		1911675-00	74S138 DECODER=THREE INPUT	1	E51
49	49		1911944-00	555CN TIMER,FUNCT.BLOCK	1	E5
50	50		1911983-00	74S133 NAND GATE=POSITIVE 13IN	1	E45
51	51	SEE LINE #83.	1912048-02	DEC 7812-02 VOLT.REG.FIX T12V 1.5A T	1	Q2
52	52		1912388-00	74S02 NOR GATE=QUAD 2IN,POS	1	E30
53	53		1912389-00	74S08 AND GATE=QUAD 2IN,POS 14	2	E22,E23
54	54		1912541-00	VOLT.REG.FIX -5V .02A	1	Q1
55	55		1912746-00	DEC 74S37 NAND GATE=QUAD 2IN	1	E12
56	56		1912807-00	LS10 NAND GATE=TRIPLE 3IN	2	E11,E40
57	57		1912828-00	LS85 COMPARATOR,4BIT MAGNITUDE	1	E54
58	58		1912853-00	LS175 FF-D QUAD	2	E10,E15
59	59		1912867-00	LS298 MUX 1 OF 4,2IN W/STORAGE	2	E21,E27
60	60		1913340-00	74S32 OR GATE=QUAD 2IN	2	E35,E36
61	61		1913462-00	74S240 OCTAL BUFFER,INVERTING TRI=STA	1	E52
62	62		1913670-00	74S373 LATCH 8BIT TRASP TRISTATE	2	E50,E57,E64
63	63		1913777-00	LS240 DRIVER,LINE,OCTAL,TRI-ST	9	E24,E68,E69,E86,E119,E136,
					CONT	E169,E186,E203
64	64		1914086-00	74S30 NAND GATE=POS 8IN	1	E60
65	65		1914451-00	74LS393 COUNTER,BINARY,4BIT	1	E43
66	66		1915193-00	LS244 DRIVER,LINE,OCTAL,TRI-ST	1	E17
67	67		1915219-00	LS373 FF-D OCTAL=TRANSPARENT	8	E2,E4,E9,E14,E20,E26,E32,E38
68	68		23249F1-00	F1-01 PROM, 1	1	E67
69	69		23468A2-00	A2-05 PROM,	1	E66
70	70		7414765-00	HEATSINK	1	
71	71		9000024-01	EYELET, ROLLED FLANGE, .121 OD X .196 LG	12	
72	72		9010092-00	SCREW,PAN ,PHIL, 4-40X 5/16 SS	1	
73	73		9007201-03	TRANSIPADS #10253	1	
74	74		9009149-00	PIN, STAKING, P.C. BOARD, .025 X .025	5	
75	75		9009185-00	JUMPER, WIRE, INSULATED, BLACK BAND	11	W2,W7,W10-W16,W20,W21

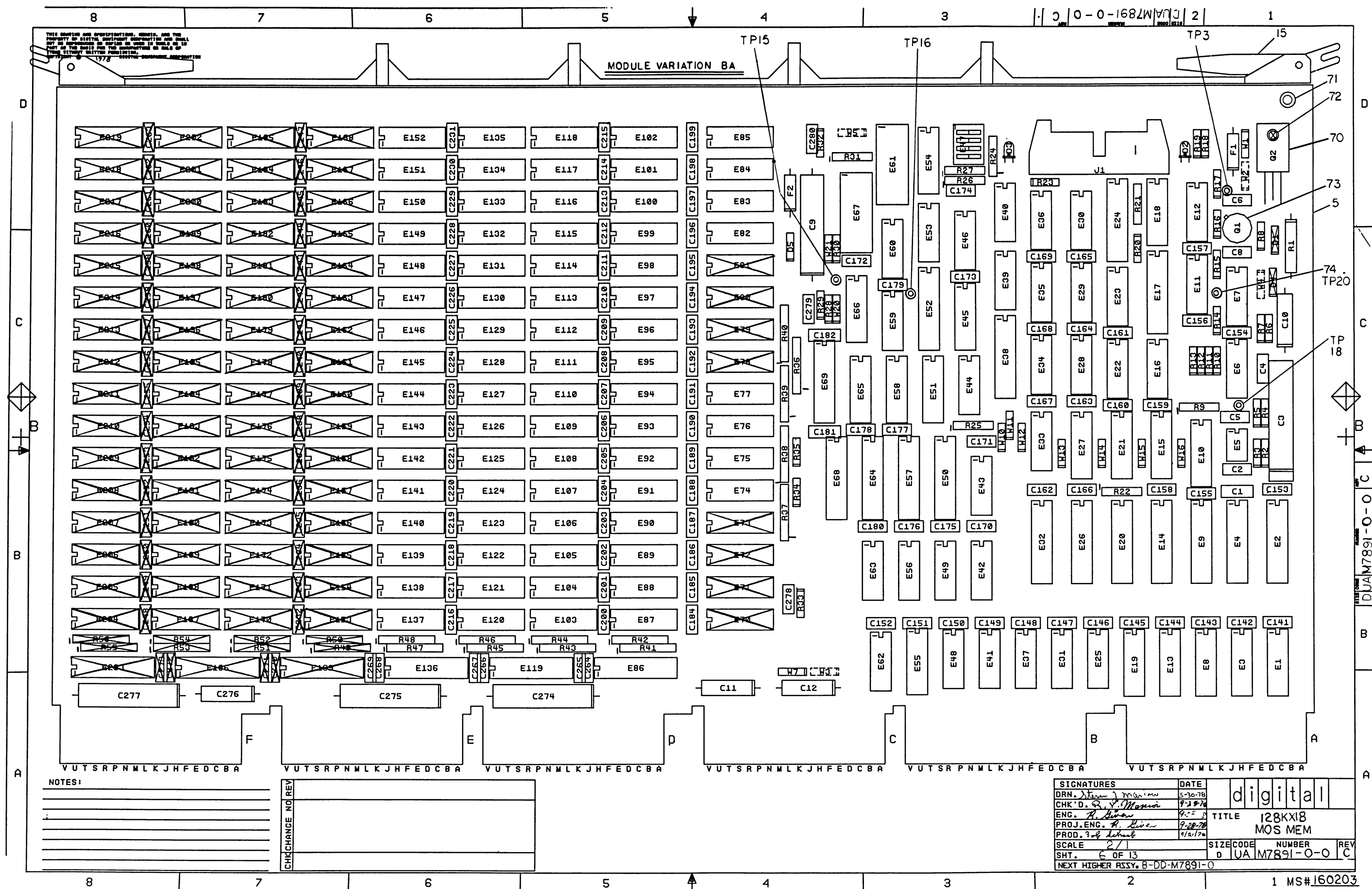
TITLE	PARTS LIST	SIZE	CODE	DOCUMENT NUMBER	REV
DIGITAL EQUIPMENT CORPORATION	MS11-LD 128K X 18 MOS MEMORY	K	PL	M7891-DC-DBP	A
MAYNARD, MASSACHUSETTS					

LINE	ITEM	DOCUMENT NO.	PART NO.	DESCRIPTION	QTY	REFERENCE DESIGNATORS
76	76		1109991-00	1N 754A VZ= 6.8 5% .40W	1	D5
77	77		1105275-00	***** THIS ITEM IS NOT USED *****	-	
78	78		1210929-04	FUSE, SUB-MINI .250A, 125V, AXIAL LEAD	1	F2
79	79		2114408-01	16K MOS RAM 200NS 16PIN DYNA	144	E70-E85,E120-E135,E170-E185,
					CONT	E87-E118,E137-E168,E187-E202,
					CONT	E204-E219
80	80		1301969-00	22 1/4W 5% CC (13-00	1	R34

81 NOTE: M7891-DA IS A PRIMARY VARIATION OF THE 128K X 18 BIT SYSTEM (NOT A MODULE TYPE).
82 NOTE: M7891-DC IS A MODULE TYPE USING FUJITSU 16K MOS DEVICES.
83 NOTE: 1912048-05 MAY BE SUBSTITUTED FOR ITEM 51 PART #1912048-02.

DIGITAL EQUIPMENT CORPORATION MAYNARD, MASSACHUSETTS	TITLE PARTS LIST M611-LD 128K X 18 MOS MEMORY	SIZE K	CODE PL	DOCUMENT NUMBER M7891-DC-DBP	REV A
---	---	-----------	------------	---------------------------------	----------

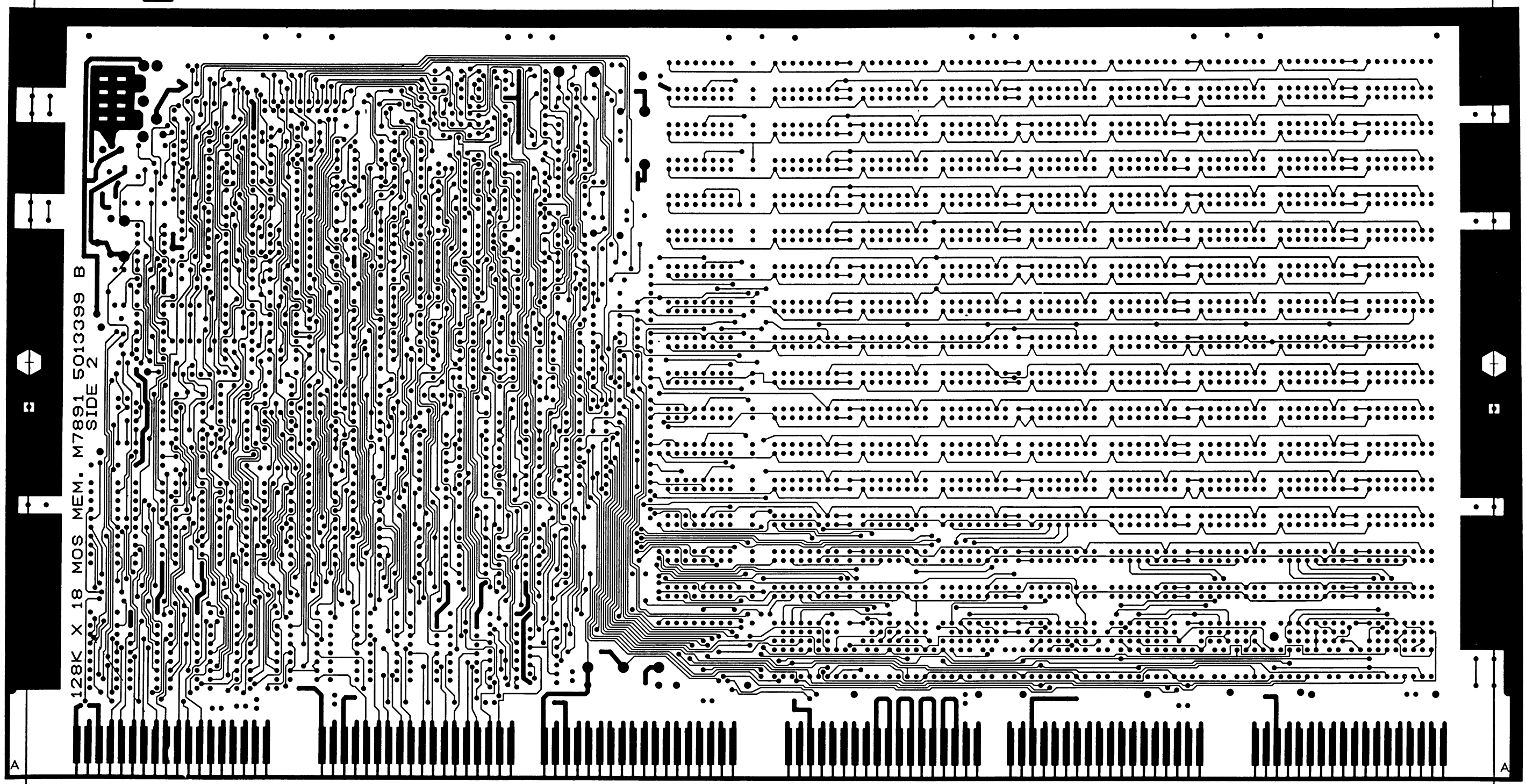




THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1978, DIGITAL EQUIPMENT CORPORATION.

L4

H 834AJ 12 / 13 MIL



87654321

THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.
COPYRIGHT © 1978, DIGITAL EQUIPMENT CORPORATION

NOTES:

1.

STARTING ADDRESS	SWITCH SETTING (X = OFF)									
DEC (K)	OCTAL	S2-1	S2-2	S2-3	S2-4	S2-5	S2-6	S2-7	S2-8	S2-9
0	00000000									
4	00020000								X	
8	00040000							X		
12	00060000							X	X	
16	00100000						X			
20	00120000						X		X	
24	00140000						X	X		
28	00160000						X	X	X	
32	00200000					X				
36	00220000					X			X	
40	00240000					X		X		
44	00260000					X		X	X	
48	00300000					X	X			
52	00320000					X	X		X	
56	00340000					X	X	X		
60	00360000					X	X	X	X	
64	00400000					X				
68	00420000					X			X	
72	00440000					X		X		
76	00460000					X		X	X	
80	00500000					X		X		
84	00520000					X		X		X
88	00540000					X		X	X	
92	00560000					X		X	X	X
96	00600000					X	X			
100	00620000					X	X			X
104	00640000					X	X		X	
108	00660000					X	X		X	X
112	00700000					X	X	X		
116	00720000					X	X	X		X
120	00740000					X	X	X	X	
124	00760000					X	X	X	X	X

2.

STARTING ADDRESS RANGE	OCTAL	S2-1	S2-2	S2-3	S2-4	S2-5	S2-6	S2-7	S2-8	S2-9
128-252	01000000-01760000					X				
256-380	02000000-02760000				X					
384-508	03000000-03760000				X	X				
512-636	04000000-04760000			X						
640-764	05000000-05760000			X		X				
768-892	06000000-06760000			X	X					
896-1020	07000000-07760000			X	X	X				
1024-1148	10000000-10760000	X								
1152-1276	11000000-11760000	X				X				
1280-1404	12000000-12760000	X			X					
1408-1532	13000000-13760000	X			X	X				
1536-1660	14000000-14760000	X	X							
1664-1788	15000000-15760000	X	X			X				
1792-1916	16000000-16760000	X	X	X						
1920-2044	17000000-17760000	X	X	X	X					

TO OBTAIN INCREMENTAL 4K BOUNDARIES WITHIN THE SPECIFIED RANGE, REPEAT SWITCH SETTINGS FROM THE 0-124 K TABLE.
I.E.
S.A. = 260 K
S2-3 = X = OFF
S2-9 = X = OFF

3.

EUB CSR ADDRESS	MOD. UNIBUS CSR ADDRESS	SWITCH SETTING (X = OFF)			
OCTAL	OCTAL	SI-1	SI-2	SI-3	SI-4
17772100	772100				
17772102	772102				X
17772104	772104			X	
17772106	772106			X	X
17772110	772110		X		
17772112	772112		X		X
17772114	772114		X	X	
17772116	772116		X	X	X
17772120	772120	X			
17772122	772122	X			X
17772124	772124	X		X	
17772126	772126	X		X	X
17772130	772130	X	X		
17772132	772132	X	X		X
17772134	772134	X	X	X	
17772136	772136	X	X	X	X

4.

OPTION DESIGNATION	PRIMARY VARIATION	SYSTEM DESCRIPTION
MSII-LA	M789I-AA	32K X 18 BITS
MSII-LB	M789I-BA	64K X 18 BITS
MSII-LC	M789I-CA	96K X 18 BITS
MSII-LD	M789I-DA	128K X 18 BITS

5.

BUS VOLTAGE	JUMPER	
	W1	W2
+ 12V	IN	OUT
+ 15V	OUT	IN

6.

BUS VOLTAGE	JUMPER	
	W3	W7
+ 5V	IN	OUT
+ 5BBU	OUT	IN

7.

PERIPHERAL PAGE SIZE	JUMPER	
	W5	W21
2K	IN	IN
4K	OUT	IN
8K	OUT	OUT

8.

FUNCTION	JUMPER		
	W10	W11	W12
NORMAL	IN	IN	IN
ROW ADDR DISABLE	IN	IN	OUT
COL ADDR DISABLE	IN	OUT	IN
REF ADDR DISABLE	OUT	IN	IN

9.

FUNCTION	JUMPER			
	W13	W14	W15	W16
NORMAL	IN	IN	IN	IN
LAT DATA DISABLE	OUT	IN	IN	IN
CSR DATA DISABLE	IN	OUT	IN	IN
CSR DATA DISABLE	IN	IN	OUT	IN
X-ADDR DISABLE	IN	IN	IN	OUT

10.

TYPE	JUMPER
MOD UNIBUS	W4
	OUT
EUB	IN

11.

FUNCTION	JUMPER	
	W20	
NORMAL	IN	
SSYN DISABLE	OUT	

12.

IC TYPE	+ 5V	GND	+12V	-5V
MOS	9	16	8	1
74S00	14	7		
74S10	14	7		
74S11	14	7		
74S20	14	7		
74S03	14	7		
74S74	14	7		
74S74-01	14	7		
74S158	16	8		
74LS175	16	8		
8640	8	1		
8641	16	8		
74S280	14	7		
74138	16	8		
555		1	8	
74S02	14	7		
74S08	14	7		
74S37	14	7		
74LS10	14	7		
74LS85	16	8		
74LS298	16	8		
74S32	14	7		
74S240	20	10		
74LS240	20	10		
74S373	20	10		
74S30	14	7		
74LS393	14	7		
74LS244	20	10		
74LS373	20	10		
74S133	16	8		
1K X 4 PROM	18	9		
256 X 4 PROM	16	8		

13.

SIGNAL NAMES WILL BE REFERENCED AS FOLLOWS:

[X] SIGNAL NAME [Y/Z]

NUMBER OF CONNECTION POINTS ON DESTINATION SHEET.

DESTINATION SHEET NUMBER.

SOURCE SHEET NUMBER.

14.

* INDICATES BATTERY BACK UP (+5V CR)

● INDICATES .125 PAD ON SIDES 1 AND 2.

⊙ INDICATES WIRE WRAP PINS AND TEST POINTS.

15.

RESISTORS ARE 5% UNLESS OTHERWISE SPECIFIED.

16.

SOME .47UFD AND .01UFD ARE NOT USED ON THE AA,BA,CA PRIMARY VARIATIONS.

REVISIONS

CHK	REV.	DATE	BY	DESCRIPTION
1	1	11/18/78	R. GIVEN	INITIAL DESIGN
2	2	12/11/78	R. GIVEN	REVISED FOR MANUFACTURE
3	3	1/11/79	R. GIVEN	REVISED FOR MANUFACTURE
4	4	4-9-79	R. GIVEN	REVISED FOR MANUFACTURE
5	5	11/18/80	R. GIVEN	REVISED FOR MANUFACTURE

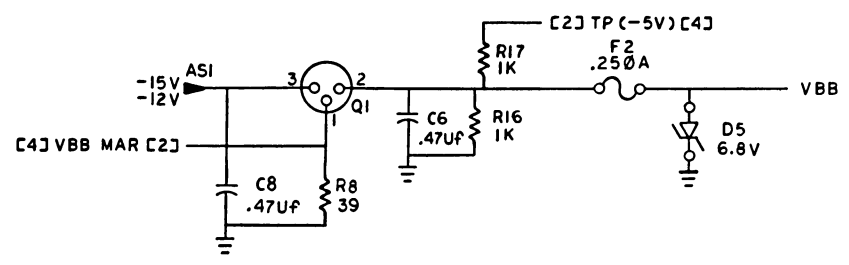
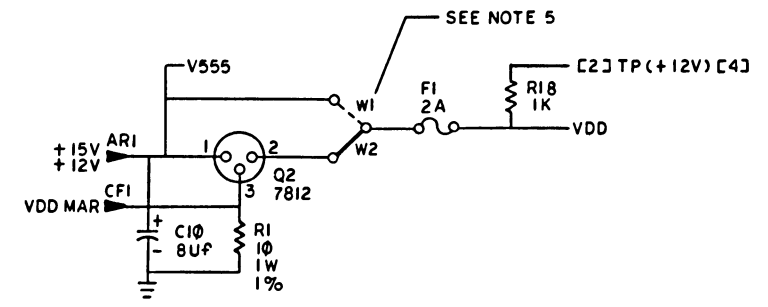
DRN	CHK'D	ENG.	PROJ. ENG.	PROD.	DATE	FIRST USED ON	TITLE
1789I-01	11/18/78	11/18/78	11/18/78	11/18/78	11/18/78	11/34	128K X 18 BIT MOS MEM

SIZE	CODE	NUMBER	REV.
D	CS	M789I-0-1	D

SHEET	OF	DIST.
1	14	

"THIS DRAWING AND SPECIFICATIONS HEREIN ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION OF DIGITAL EQUIPMENT CORPORATION" COPYRIGHT © 1978

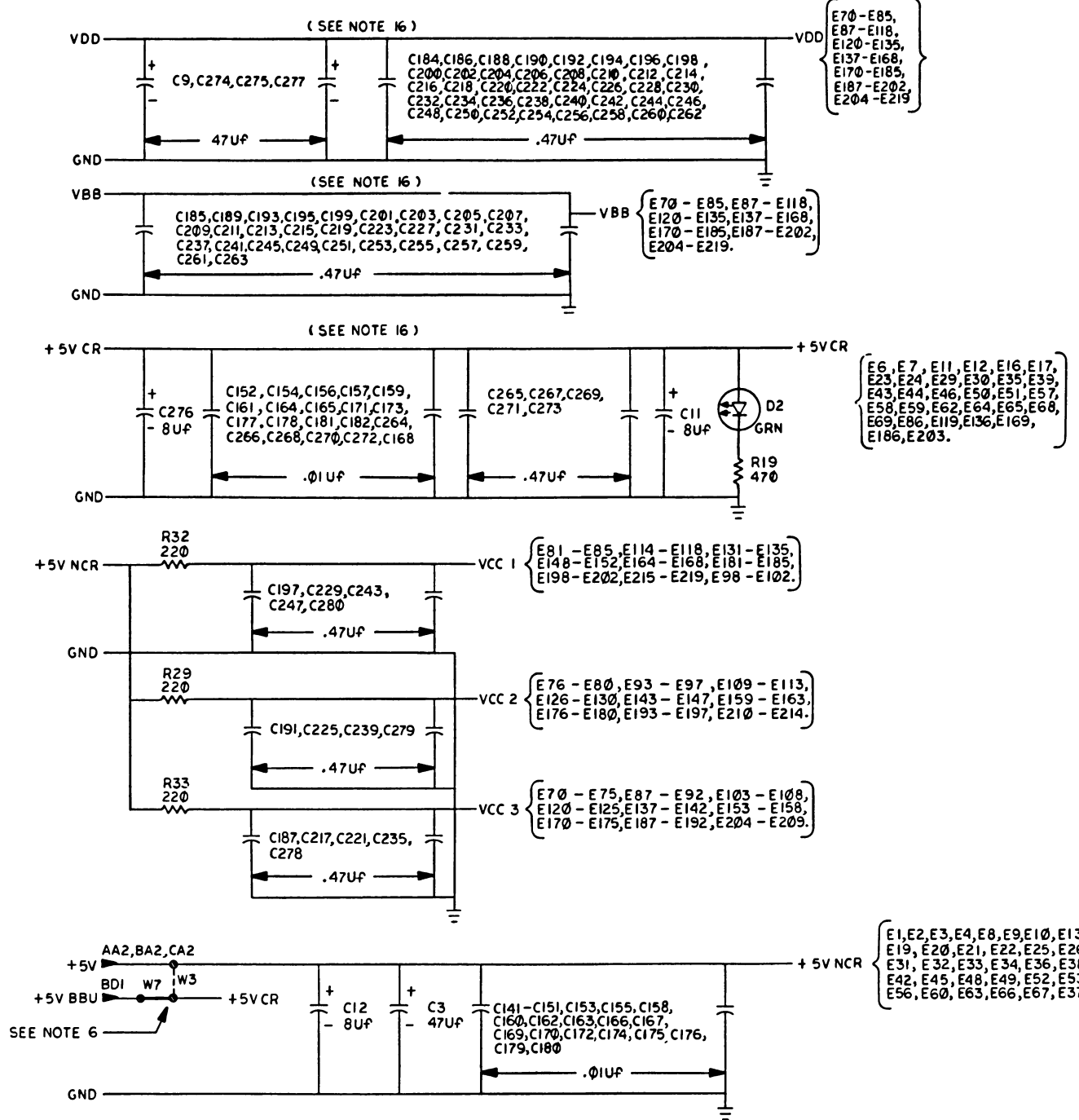
1-0-1682W50 2



AC2, AT1, BC2, BT1, CC2, CT1, DC2, DT1, EC2, ET1, FC2, FT1

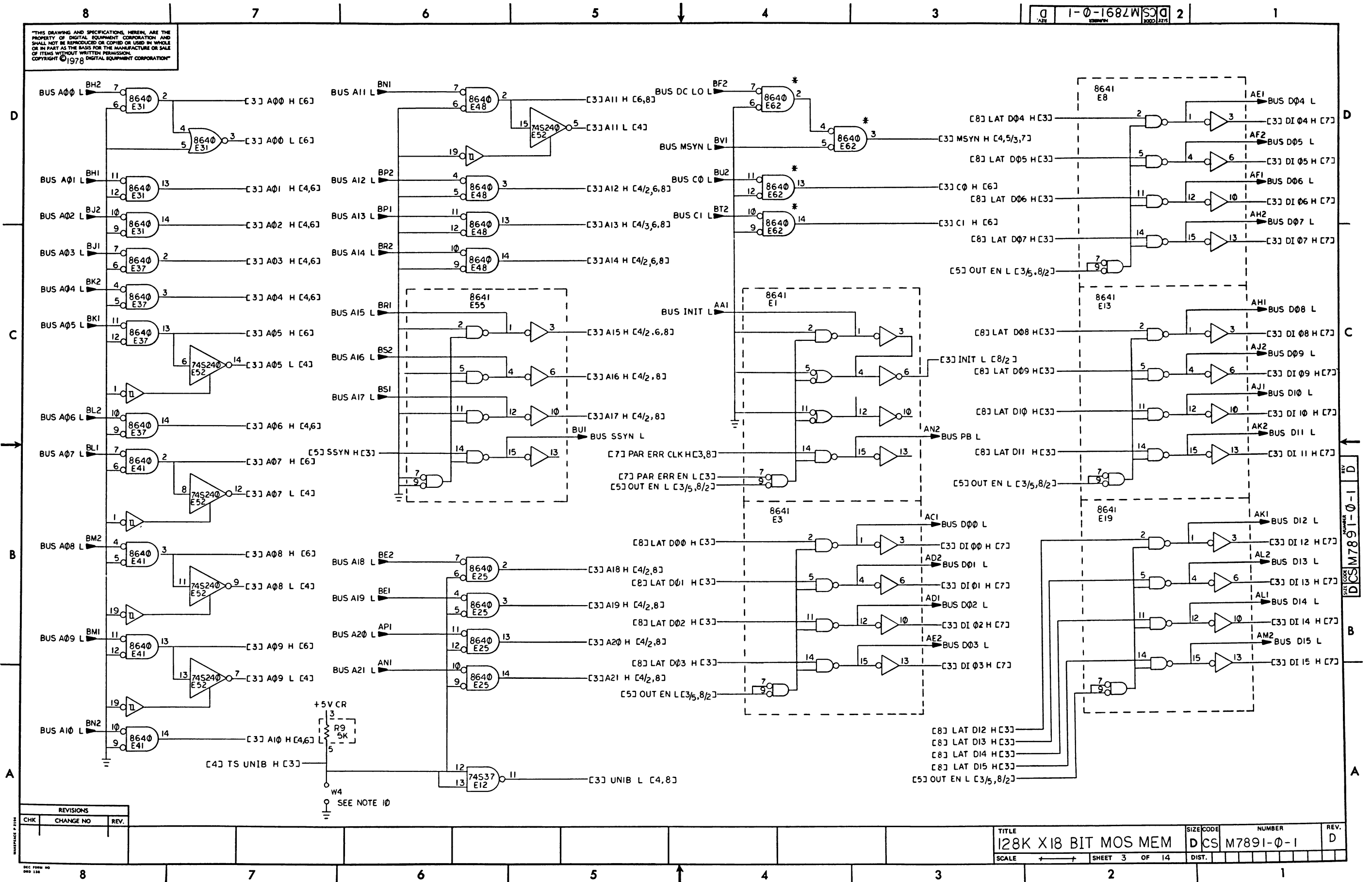
BUS GRANT LINES

DK2	DL2
DP2	DR2
DM2	DN2
DS2	DT2
CA1	CB1



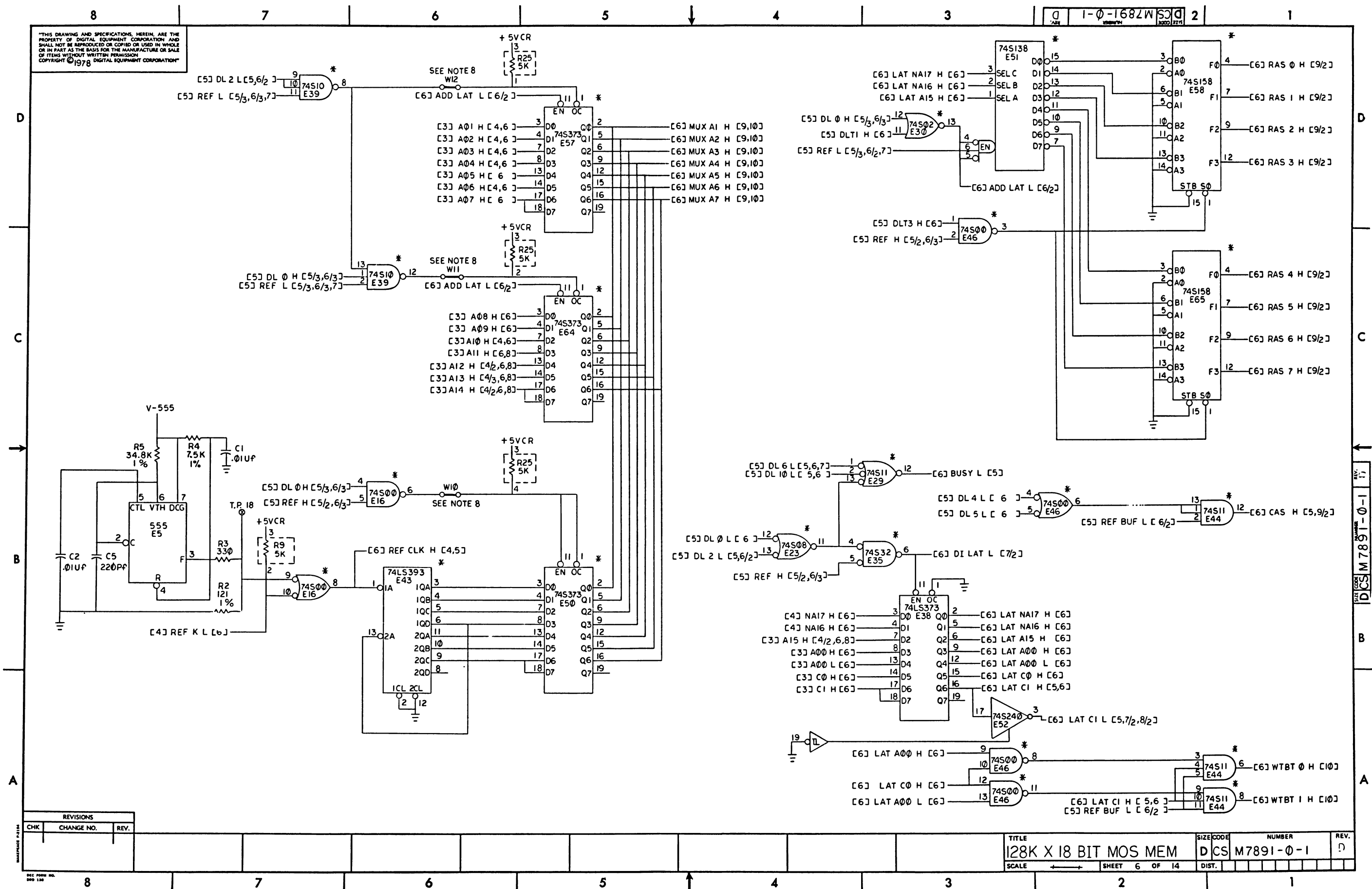
REV.	CHANGE NO.
1	1

"THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1978 DIGITAL EQUIPMENT CORPORATION"



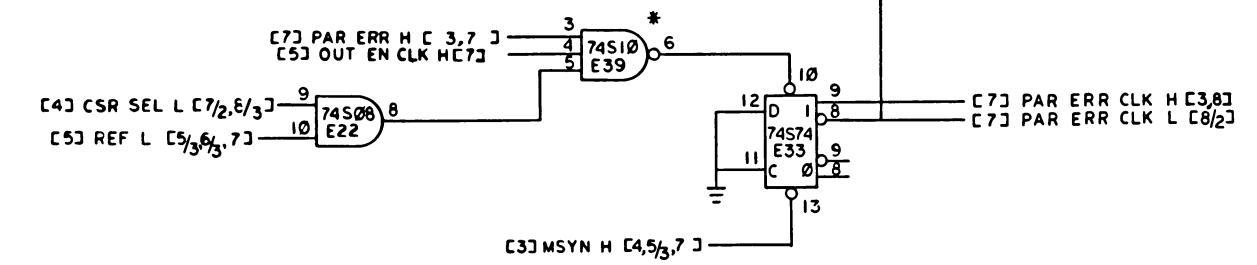
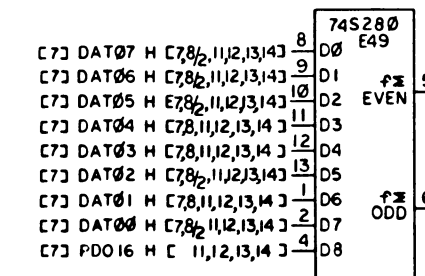
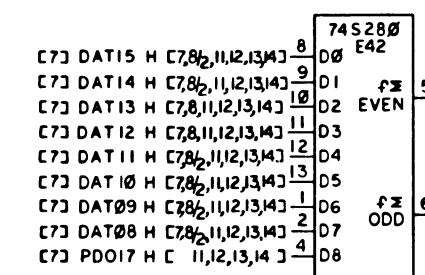
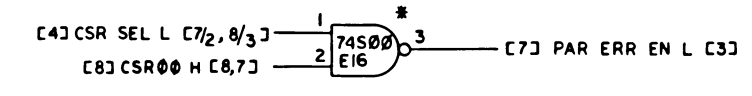
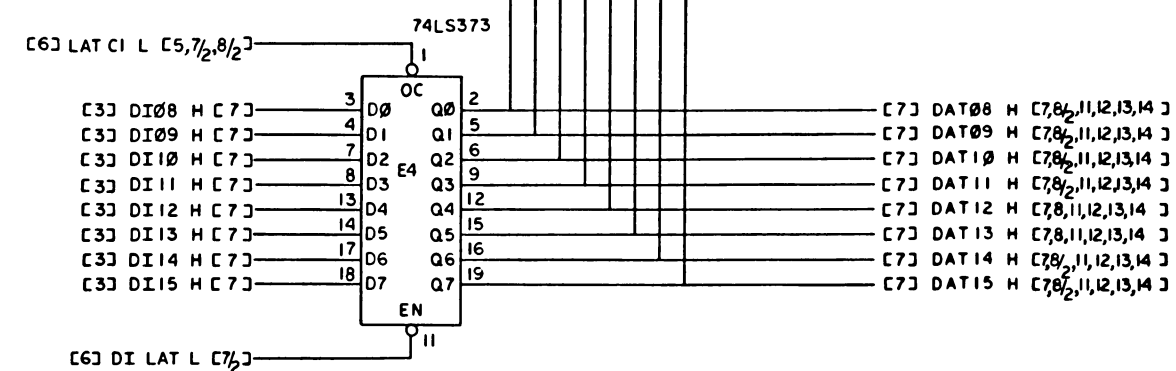
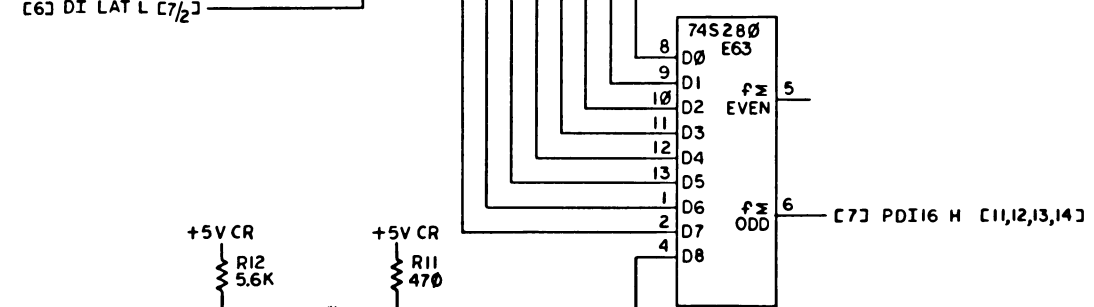
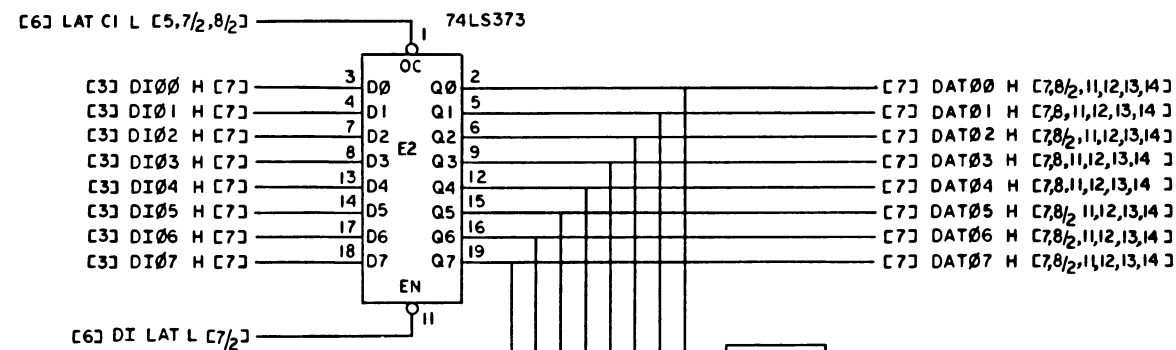
REVISIONS		
CHK	CHANGE NO	REV.

TITLE		SIZE/CODE	NUMBER	REV.
128K X18 BIT MOS MEM		D	CS M7891-0-1	D
SCALE	SHEET 3 OF 14	DIST.		



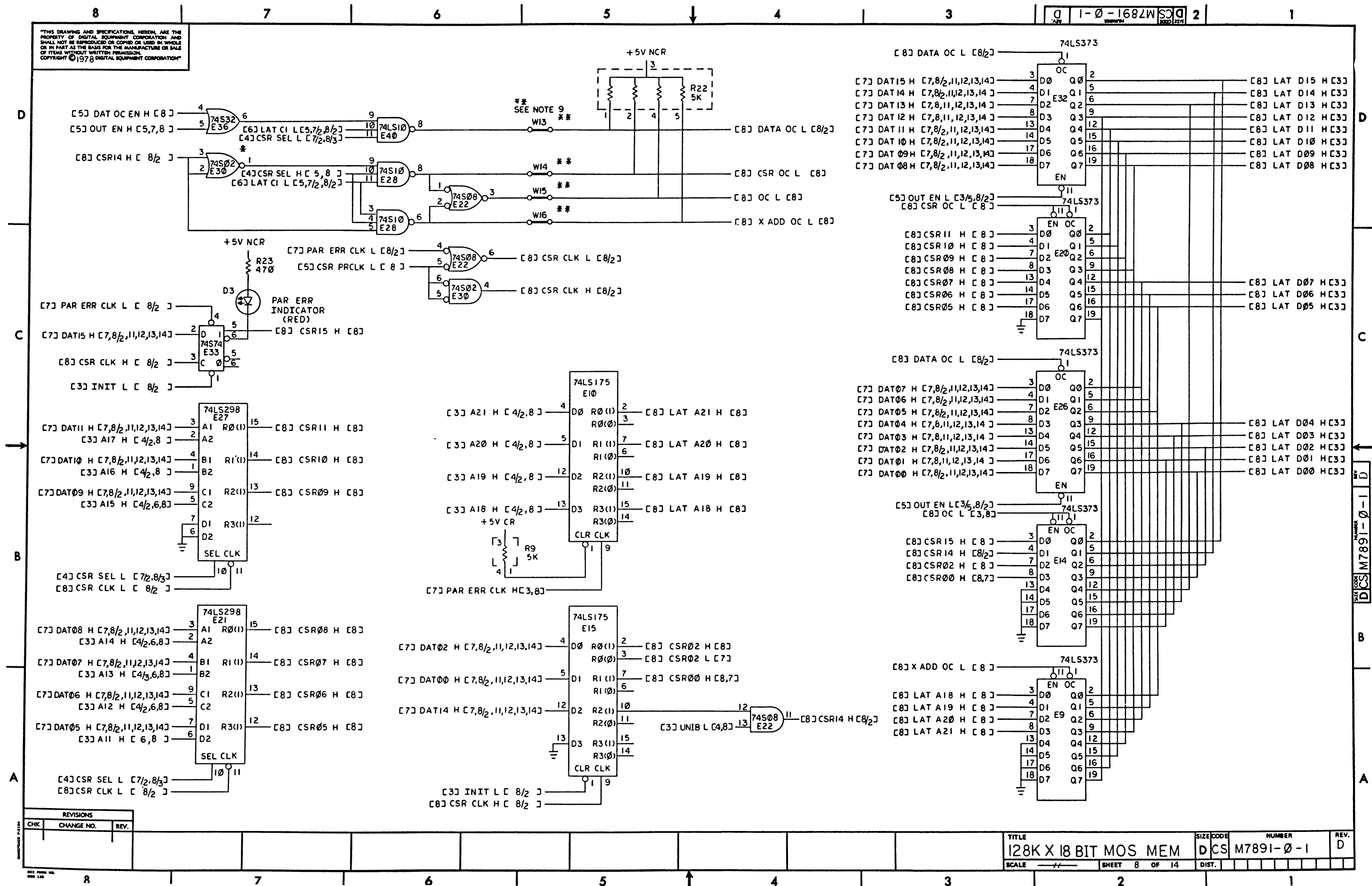
THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1978 DIGITAL EQUIPMENT CORPORATION

1-0-1682W DCS M7891-0-1 2



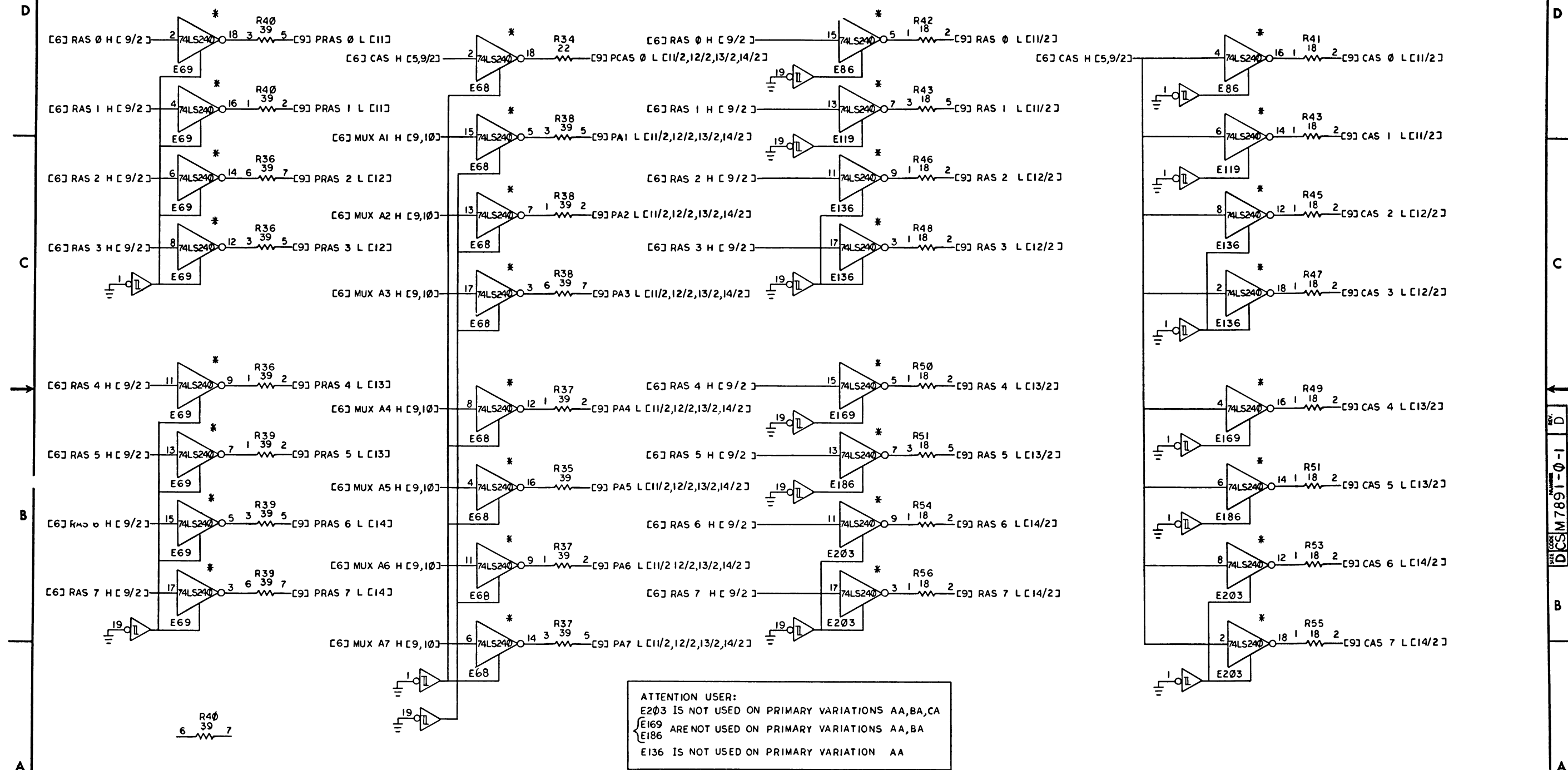
REVISIONS		
CHK	CHANGE NO.	REV.

TITLE		SIZE CODE	NUMBER		REV.
128K X 18BIT MOS MEM		D CS	M7891-0-1		D
SCALE		SHEET	7 OF 14		DIST.



THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION. COPYRIGHT © 1978 DIGITAL EQUIPMENT CORPORATION

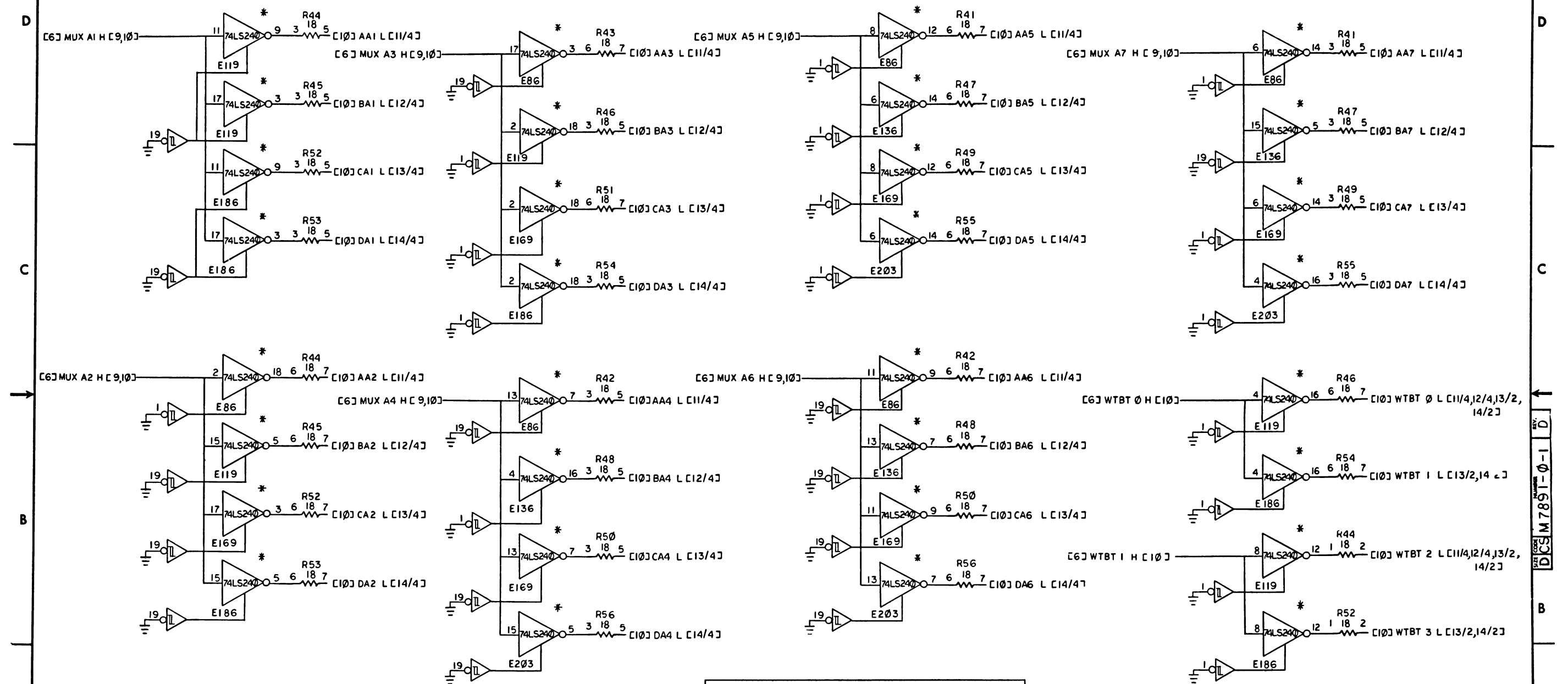
NOTE:
R36 THRU R56 PIN 4 GOES TO +5V



REVISIONS		
CHK	CHANGE NO.	REV.

TITLE		SIZE/CODE	NUMBER	REV.
128K X 18 BIT MOS MEM		DCS	M7891-0-1	D
SCALE	SHEET	DIST.		
	9 OF 14			

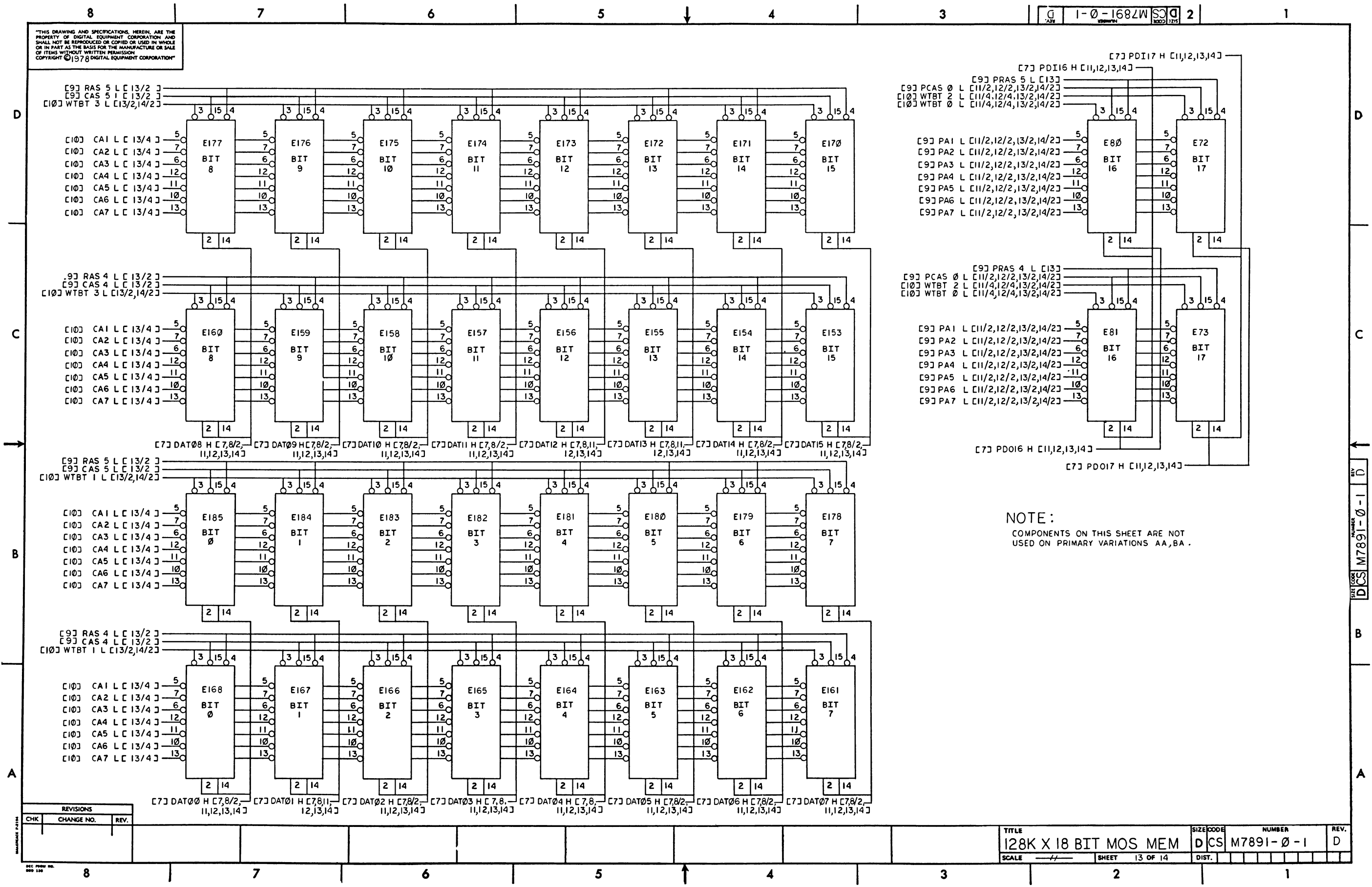
"THIS DRAWING AND SPECIFICATIONS, HEREIN, ARE THE PROPERTY OF DIGITAL EQUIPMENT CORPORATION AND SHALL NOT BE REPRODUCED OR COPIED OR USED IN WHOLE OR IN PART AS THE BASIS FOR THE MANUFACTURE OR SALE OF ITEMS WITHOUT WRITTEN PERMISSION.
COPYRIGHT ©1978 DIGITAL EQUIPMENT CORPORATION"



ATTENTION USER:
E203 IS NOT USED ON PRIMARY VARIATIONS AA,BA,CA
{E169 ARE NOT USED ON PRIMARY VARIATIONS AA,BA
E186
E136 IS NOT USED ON PRIMARY VARIATION AA

REVISIONS		
CHK	CHANGE NO.	REV.

TITLE		SIZE	CODE	NUMBER		REV.
128K X 18 BIT MOS MEM		D	CS	M7891-0-1		D
SCALE	← →	SHEET	10 OF 14	DIST.		



REVISIONS		
CHK	CHANGE NO.	REV.

TITLE				SIZE CODE		NUMBER				REV.	
128K X 18 BIT MOS MEM				D CS		M7891-0-1				D	
SCALE		SHEET		13 OF 14		DIST.					

BLANK

BLANK